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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/820,253	03/28/2001	Sher Singh Rajput	KUM-103US	1994
7590	11/29/2004		EXAMINER	
RATNER AND PRESTIA One Westlakes, Berwyn, Suite 301 P.O. Box 980 Valley Forge, PA 19482-0980				LIN, SUN J
		ART UNIT	PAPER NUMBER	2825

DATE MAILED: 11/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/820,253	RAJPUT ET AL.	
Examiner	Art Unit		
Sun J Lin	2825		

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

1)  Responsive to communication(s) filed on 28 March 2001.

2a)  This action is **FINAL**.                    2b)  This action is non-final.

3)  Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## **Disposition of Claims**

4)  Claim(s) 1-19 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5)  Claim(s) \_\_\_\_\_ is/are allowed.

6)  Claim(s) 1-19 is/are rejected.

7)  Claim(s) \_\_\_\_\_ is/are objected to.

8)  Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

9)  The specification is objected to by the Examiner.

10)  The drawing(s) filed on 28 March 2001 is/are: a)  accepted or b)  objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)  The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a)  All    b)  Some \* c)  None of:  
1.  Certified copies of the priority documents have been received.  
2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3.  Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a))

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1)  Notice of References Cited (PTO-892)  
2)  Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3)  Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date .

4)  Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_ .

5)  Notice of Informal Patent Application (PTO-152)

6)  Other: \_\_\_\_ .

## DETAILED ACTION

1. This office action is in response to application 09/820,253 filed on 03/28/2001. Claims 1 – 19 remain pending in the application.

### ***Arrangement of the Specification***

2. The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections *in order*. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) TITLE OF THE INVENTION.
- (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
- (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
- (d) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC (See 37 CFR 1.52(e)(5) and MPEP 608.05. Computer program listings (37 CFR 1.96(c)), "Sequence Listings" (37 CFR 1.821(c)), and tables having more than 50 pages of text are permitted to be submitted on compact discs.) or REFERENCE TO A "MICROFICHE APPENDIX" (See MPEP § 608.05(a). "Microfiche Appendices" were accepted by the Office until March 1, 2001.)
- (e) BACKGROUND OF THE INVENTION.
  - (1) Field of the Invention.
  - (2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
- (f) BRIEF SUMMARY OF THE INVENTION.
- (g) BRIEF DESCRIPTION OF THE DRAWING (S).
- (h) DETAILED DESCRIPTION OF THE INVENTION.
- (i) CLAIM OR CLAIMS (commencing on a separate sheet).
- (j) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).
- (k) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

### ***Specification Objections***

3. The specification is objected to because of following informalities:

Page 9 – 11, move all text included under "Detailed Description of the Invention" before "Description of the Preferred Embodiments" on page 12.

Appropriate correction is required.

### ***Claim Objections***

4. Claims listed below are objected to because of the following informalities:
  - Claim 1, line 1, change "said circuit" to —**said current conveyer circuit**—.
  - Claim 1, line 4, change "the injected current" to —**an injected current**—.
  - Claim 1, line 4, change "if a current" to —**when a current**—.
  - Claim 2, line 1, change "A circuit" to —**The circuit conveyor circuit**—.
  - Claim 2, line 1, after "conveyor" insert —**circuit**—.
  - Claim 3, line 1, change "A circuit" to —**The circuit conveyor circuit**—.
  - Claim 4, line 1, change "A circuit" to —**The circuit conveyor circuit**—.
  - Claim 4, line 1, after "conveyor" insert —**circuit**—.
  - Claim 5, line 1, change "A circuit" to —**The circuit conveyor circuit**—.
  - Claim 6, line 1, change "A circuit" to —**The circuit conveyor circuit**—.
  - Claim 6, line 1, change "input single" to —**input, single**—.
  - Claim 7, line 1, change "A circuit" to —**The circuit conveyor circuit**—.
  - Claim 7, line 1, change "the LVCM" to —**each LVCM**—.
  - Claim 7, line 1, change "the conventional CM" to —**a conventional current mirror**—.
  - Claim 7, line 2, change "the input port" to —**its input port**—.
  - Claim 8, line 1, change "A circuit" to —**The circuit conveyor circuit**—.
  - Claim 8, line 1, change "the LVCM" to —**each LVCM**—.
  - Claim 9, line 1, change "A circuit" to —**The circuit conveyor circuit**—.
  - Claim 10, line 1, change "A circuit" to —**The circuit conveyor circuit**—.
  - Claim 10, line 1, before "adaptive" insert —**an**—.
  - Claim 10, line 1 – 2, change "the LVCM" to —**each LVCM**—.
  - Claim 11, line 1, change "A circuit" to —**The circuit conveyor circuit**—.
  - Claim 11, line 1, change "the adaptive" insert —**an adaptive**—.
  - Claim 12, line 1, change "A circuit" to —**The circuit conveyor circuit**—.
  - Claim 12, line 1, delete —**MOSFET's**—.
  - Claim 13, line 1, change "A circuit" to —**The circuit conveyor circuit**—.
  - Claim 13, line 1, change "the voltage at port voltage" to —**voltage**—.

Claim 13, line 2, change "the action" to —**an action**—.  
Claim 14, line 1, change "A circuit" to —**The circuit conveyor circuit**—.  
Claim 14, line 1, after "conveyor" insert —**circuit**—.  
Claim 15, line 1, change "A circuit" to —**The circuit conveyor circuit**—.  
Claim 15, line 1, change "the capacitance" to —**a capacitance**—.  
Claim 16, line 1, change "A circuit" to —**The circuit conveyor circuit**—.  
Claim 16, line 1, after "conveyor" insert —**circuit**—.  
Claim 16, line 2, change "the gate" to —**a gate**—.  
Claim 17, line 1, change "A circuit" to —**The circuit conveyor circuit**—.  
Claim 17, line 1, change "the resistance" to —**a resistance**—.  
Claim 18, line 1, change "A circuit" to —**The circuit conveyor circuit**—.  
Claim 18, line 1, delete —**MOSFET's**—.  
Claim 19, line 1, change "A circuit" to —**The circuit conveyor circuit**—.  
Claim 19, line 1, after "conveyor" insert —**circuit**—.

Appropriate correction is required.

#### ***Claim Rejections - 35 USC § 112***

5. Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to a gap between the necessary structural connections. See MPEP § 2172.01. The omitted structural cooperative relationships are: interconnection between M1, M2, M3, M4, LVCM1, LVCM2, LVCM3, port X and other essential circuit elements of a circuit conveyor circuit.

Other dependent Claims 2 – 19 that are not specifically cited above are also rejected because of the deficiencies of their respective parent claims.

#### ***Conclusion***

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sun J Lin whose telephone number is (571) 272 - 1899. The examiner can normally be reached on Monday-Friday 9:30AM - 6:30PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew S Smith can be reached on (571) 272 - 1907. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Sun James Lin  
Patent Examiner  
Art Unit 2825  
November 22, 2004



VUTHE SIEK  
PRIMARY EXAMINER